

Application Serial No. 09/838,821
Response dated January 10, 2006
Reply to Final Office Action of August 10, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1 - 9. (cancelled)

Claim 10-13. (cancelled)

Claim 14-15. (cancelled)

Claim 16. (New) A method of inhibiting c-jun activation in a mammalian or an avian cell, the c-jun activation being associated with DNA damage, the method comprising contacting the cell with an inhibitor of Janus family kinase 3 (JAK-3) to inhibit the c-jun activation.

Claim 17. (New) The method of claim 16, wherein the cell is exposed to a DNA damaging agent.

Claim 18. (New) The method of claim 17, wherein the DNA damaging agent is ara-C, a topoisomerase II inhibitor, an alkylating agent, ultraviolet radiation, or ionizing radiation.

Claim 19. (New) The method of claim 17, wherein the DNA damaging agent is ultraviolet radiation or ionizing radiation.

Claim 20. (New) The method of claim 17, wherein the cell is exposed to the DNA damaging agent *in vitro*.

Claim 21. (New) The method of claim 17, wherein the cell is exposed to the DNA damaging agent *in vivo*.

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Claim 22. (New) A therapeutic method for treating or preventing a pathological condition in a mammal wherein c-jun activation is implicated and inhibition of c-jun activation is desired, comprising administering to the mammal in need of such therapy an effective amount of a JAK-3 inhibitor.

Claim 23. (New) The therapeutic method of claim 22, wherein the pathological condition is amyotrophic lateral sclerosis.

Claim 24. (New) A method for inhibiting apoptosis in a cell comprising contacting the cell with a JAK-3 inhibitor.

Claim 25. (New) The method of claim 24, wherein the apoptosis is ceramide-induced or stress-induced apoptosis.

Claim 25. (New) The method of claim 24, wherein c-jun activation is inhibited.